

Work Order ID 71320

Page 1

Tuesday, June 28, 2011 10:05:19 AM

Item ID: D3391-025

Accept



Setup Start



Revision ID:

Item Name: Aft Tube Assembly

Stop



Start Date: 6/28/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/28/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: MF

Date: 11-06-28 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3391	Rev H/ DEO

100 0.00

MORI SEIKI CNC LATHE LARGE 1 0

Mori Seiki
Mori Seiki CNC Lathe Large Memo 0.00

Turn as per Folio FA599 Rev: _____ & Dwg D3391 Rev: _____

scribe batch # on fwd end at 90 degree

Mm.v 11/08/15

110 0.00

QC2- Inspect parts off machine FAI/FAIB 1 0

QC Memo 0.00

Quality Control

Mm.z 11/08/15

111 0.00

QC8- Inspect parts - second check 1 8 1 2

QC Memo 0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

150

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

Skidtubes

Skidtubes

0.00

I-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803

160



BENDING MACHINE - SKIDTUBES

0.00

0.00

CNC Bend 1

CNC Delta 100 Bender

Memo

Form as per Dwg D3391 Using Bend Prog 3391025

170



QC

QC5- Inspect part completeness to step on W/O

0.00

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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		S E - 8 - 11						

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

180

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Skidtubes

0.00

0.00

1-Open Aft cap pilot hole to .208" as per Dwg D3391

2-Drill float bag holes using DT8809 as per Dwg D3391(Holes marked "A" Only.

3-Drill wearplate holes as per Dwg D3391 using DT8878(Mid Tube) & DT8217
Wearplate Jig.

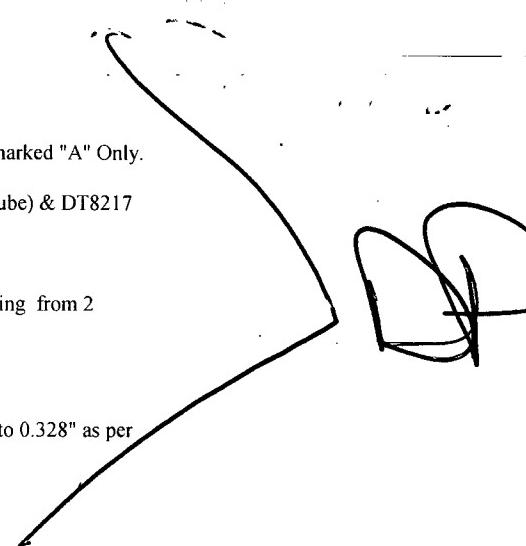
*****Do Not Open To Finished Size*****

4-Drill Wearshoe holes as per DWG D3391 using DT8939 locating from 2
previously drilled aft wearplate holes.

5-Open wearplate holes to 0.250" and cbore as per dwg D3391

6-Open up all wearshoe , wearplate to 0.297"and float bag holes to 0.328" as per
Dwg D3391.

7-Deburr



11-9-15

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00

S work

0.00



QC

Memo

Quality Control

200

Chemical Conversion Coat per QSI005 4.1

0.00

JW

11-09-19

HandFinish



Memo

0.00

210

QC3- Inspect Part Finish

0.00

QC



Memo

0.00

DP - 11-9-19 -

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Cust Item ID:

Required Date: 7/28/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

220

Operation
Description

Skidtubes

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Skidtubes

Skidtubes

Memo

0.00

Instal spacers as per dwg D3391
A/R Magnabond 6398 Batch: 117870
exp. date: 08/2012
cure time 12hrs as per QSI0015

OK 11/09/10

B 11/09/10

230



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S ualzo

40

235



HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

0.00

Memo

0.00

AND REALODINE AS PER PAR09-043

IX 11/09/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Cust Item ID:

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

240



Powdercoat

Powder Coating

250



QC

Quality Control

Operation
Description

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Memo 3:30 0.00
 START TIME: 320 0°F
 OVEN TEMPERATURE: 320 0°F
 FINISH TIME: 4:00

1X 6/28/11/06/26

M118439

QC3- Inspect Part Finish

0.00

1 of 10 uLog 28

Memo 0.00

260



HandFinish

Hand Finishing

HandFinishing

0.00

Memo 0.00

1 of 10 uLog 28

✓1-Install inserts as per Dwg D3391
 ✓2-Install Aft Cap as per Dwg D3391
 ✓A/R Sikaflex-241-291 M118439
 Sikaflex expiry date: 12/05

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Cust Item ID:

Required Date: 7/28/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

270



QC

Quality Control

Operation
Description

QC5- Inspect part completeness to step on W/O

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

S wlo 128

280



Packaging

Packaging

Identify as per dwg & Stock Location: WLO

0.00

D412-742-043 / 1371328

1 4 11/10/2012

290



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

11/10/03 JJ

MF
11-09-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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NOTE: Date & initial all entries

Picklist Print

Page 1

Tuesday, June 28, 2011 10:05:16 AM

Work Order ID: 71320



Parent Item: D3391-025



Parent Item Name: Aft Tube Assembly

Start Date: 6/28/2011

Required Date: 7/28/2011

Start Qty: 1.00

Required Qty: 1.00

Comments:

- IPP Rev B 06-02-07 ECN773 dwg rev. D EC
- IPP Rev:C 06-03-28 Update Manuf. Instructions JLM □□□
- IPP rev D 07.03.20 revF dwg EC
- IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD
- IPP Rev:F 07-11-13 ECN 1056 DD verified by: EC
- IPP Rev:G 08-09-10 revH as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6014-090 		Manufactured	No		100	Each	0.0000	1	1		1	mm.c	
ALUMINUM EXTRUSION 		Manufactured	No		230	Each	38.0000	4	4		4	11/08/15	
SPACER 		Manufactured	No		72851						4	dh	11/09/19
D2646 		Manufactured	No		70822	Location	Loc Qty	Loc Code					
Aft Cap 		Manufactured	No		270	LG	38						
						70822	38						
D3537-1 		Manufactured	No		62678	Location	Loc Qty	Loc Code					
Wearpad 		Manufactured	No		270	FP004	60					x1	
						68280	60						
						FP006	14						
						62678	14						
						FP017	41						
						69278	34						
						69817	7						
								B72124				x1	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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NOTE: Date & initial all entries

Picklist Print

Tuesday, June 28, 2011 10:05:16 AM

Page 2

Work Order ID: 71320



Parent Item: D3391-025



Parent Item Name: Aft Tube Assembly

Start Date: 6/28/2011

Required Date: 7/28/2011

Start Qty: 1.00

Required Qty: 1.00

D3537-7



Manufactured

No

270

Each

4.0000

1

1



SL uLoc128

Wearpad

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP019	4	
69320	4	B71689

D3553-1



Manufactured

No

270

Each

8.0000

1



SL uLoc128

Gasket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP013	8	
56568	8	B73155

D3553-3



Manufactured

No

270

Each

32.0000

1



SL uLoc128

Gasket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP	20	
31631	20	
FP013	12	
53480	12	

D3672-1



Manufactured

No

270

Each

1,122.000

2



SL uLoc128

Phenolic Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST074	1096	
64177	596	
66821	500	X2
ST077	26	
52505	26	

W/O:		WORK ORDER CHANGES					
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Tuesday, June 28, 2011 10:05:17 AM

Page 3

Work Order ID: 71320



Parent Item: D3391-025



Parent Item Name: Aft Tube Assembly

Start Date: 6/28/2011

Required Date: 7/28/2011

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

260

Each

1,122.000

14

14



M uloc128

Insert ALS4-1032-130

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST281	8	
117331	8	
ST282	1114	
117717	1114	

ALS4-1032-225

Purchased

No

270

Each

666.0000

12

12



M uloc128

Insert

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST282	666	
110768	213	
117717	453	M118696

AN3C4A

Purchased

No

270

Each

2,162.000

6

6



M uloc128

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST350	2162	
117313	2	M118983
117688	776	
117795	500	
117872	22	
118012	500	
118112	362	

W/O:		WORK ORDER CHANGES					
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Parent Item Name: Aft Tube Assembly

Start Date: 6/28/2011

Required Date: 7/28/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C5A



Purchased

No

270

Each

1,385.000

4

4



M u 104126

Bolt

Location	Loc Qty	Loc Code
FP-A	7	
115835	7	
ST350	1378	
116419	28	
116549	54	
117343	500	X4
117764	300	
117872	496	

AN960C10L



NAS1149C0332

R

Purchased

No

270

Each

0.0000

10

10



(x10) M u 105126

washer

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	71320
Description: Float Skidtube (412)	Part Number:	D3391-3
Inspection Dwg: D3391 Rev: H		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
14.000	+/-0.010	14.	✓		tape	MM.L-02
3.500	+/-0.010	3.500	✓		vern	JAL-01
88.93	+/-0.030	88.935	✓		tape	MM.L-02
Ø3.200	+/-0.010	3.200	✓		mic	CNC-05
88.93	+/-0.030	88.935	✓		tape	MM.L-02
Ø3.750	+/-0.010	3.750	✓		mic	CNC-05
30° x 160° chamfer	+/-0.010	30° x 160	✓		vern	JF-01

Measured by: MM.L

Date: 11/08/15

Audited by: S

Date: 10/18/22

HAAS Section					
1.526	+0.000/-0.030	1.525	/	/	RQ.02
7.500	+/-0.010	7.498	/	/	RQ.15
27.750	+/-0.010	27.750	/	/	RQ.07
31.750	+/-0.010	31.750	/	/	
35.250	+/-0.010	35.250	/	/	
3.300	+/-0.010	2.302	/	/	
0.200	+/-0.010	.200	/	/	
3.520	+/-0.010	3.522	/	/	
0.687	+0.010/-0.000	.688	/	/	
R0.062	+/-0.010	2.062	/	/	
Ø0.484	+0.005/-0.001	.485	/	/	

Measured by: RQ

Date: 11-8-19

Audited by: S

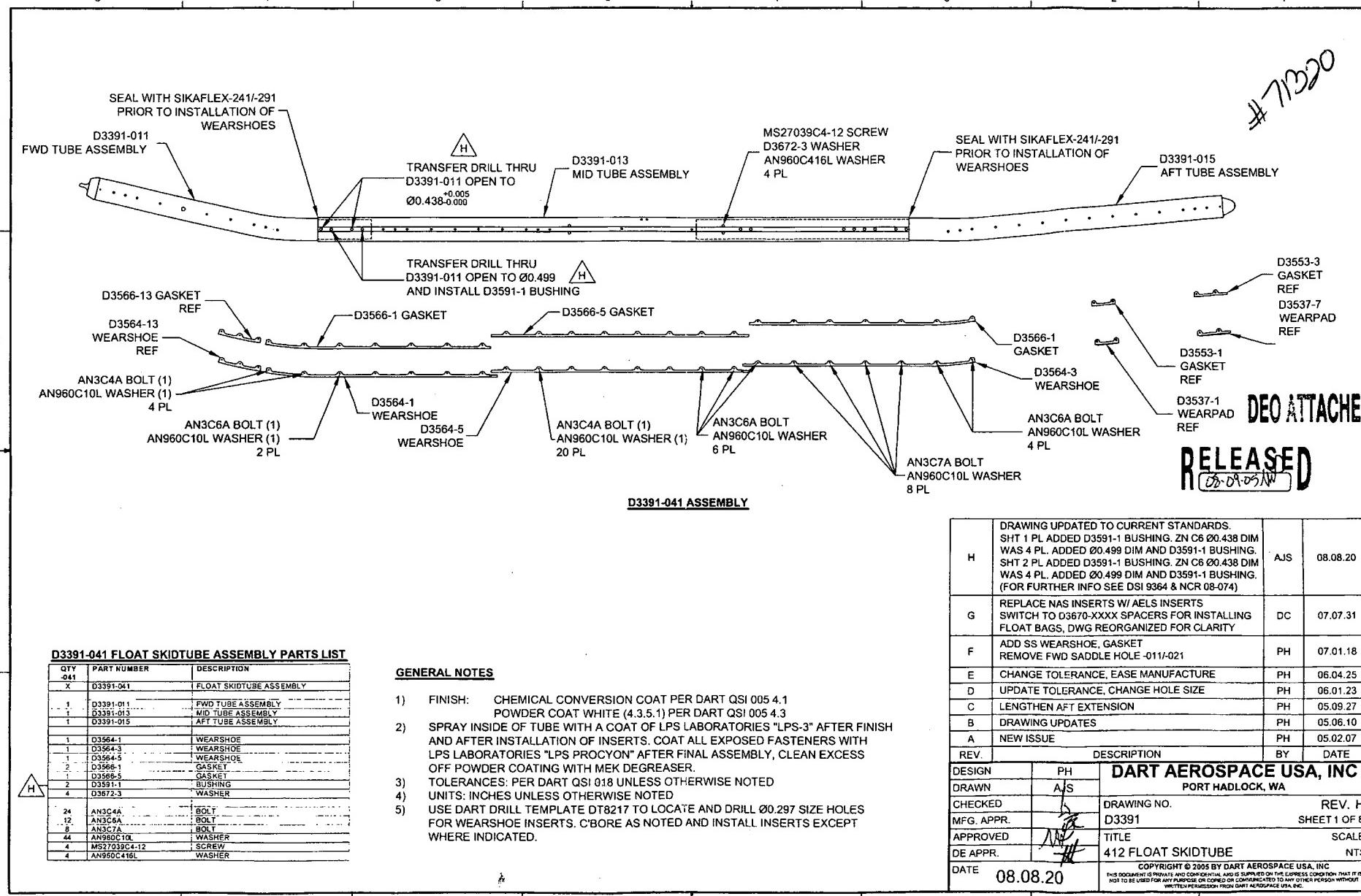
Date: 10/18/22

Rev	Date	Change	Revised by	Approved
A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
B	06.06.19	Dwg revision update	KJ/JLM	
C	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	
G	09.11.16	Dimension 0.200 removed	KJ	
H	11.06.21	Dimension 44.995 removed	KJ	SJ/JLM

22
310

0100

1111111111



#71320

- DEO ATTACHEI

RELEASED
07-09-05 PM

D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY -041	PART NUMBER	DESCRIPTION
X	D3391-01	FLOAT SKID TUBE ASSEMBLY
1	D3391-01-1	FWD TUBE ASSEMBLY
1	D3391-01-3	MID TUBE ASSEMBLY
1	D3391-01-5	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-4	WEARSHOE
2	D3566-1	GASKET
1	D3566-5	GASKET
2	D3591-1	BUSHING
4	D3672-3	WASHER
24	AN3C4A	BOLT
12	AN3C7A	BOLT
3	AN3C7A	NUT
44	AN950C10L	WASHER
4	MS27039C4-12	SCREW
4	AN950C416L	WASHER

GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
 - 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. CBORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 00.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 00.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DS1 9364 & NCR 08-074)			AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY			DC	07.07.31
F	ADD SS WEAHROUSE, GASKET REMOVE FWD SADDLE HOLE -011-021			PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE			PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE			PH	06.01.23
C	LENGTHEN AFT EXTENSION			PH	05.09.27
B	DRAWING UPDATES			PH	05.06.10
A	NEW ISSUE			PH	05.02.07
REV.	DESCRIPTION			BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC			
DRAWN	A/S	PORT HADLOCK, WA			
CHECKED	<i>b</i>	DRAWING NO.	REV. H		
MFG. APPR.	<i>b</i>	D3391	SHEET 1 OF 6		
APPROVED	<i>N/A</i>	TITLE	SCALE		
DE APPR.	<i>b</i>	412 FLOAT SKIDTUBE	NTSC		
DATE	08.08.20	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT NOT BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN CONSENT OF DART AEROSPACE USA, INC.			

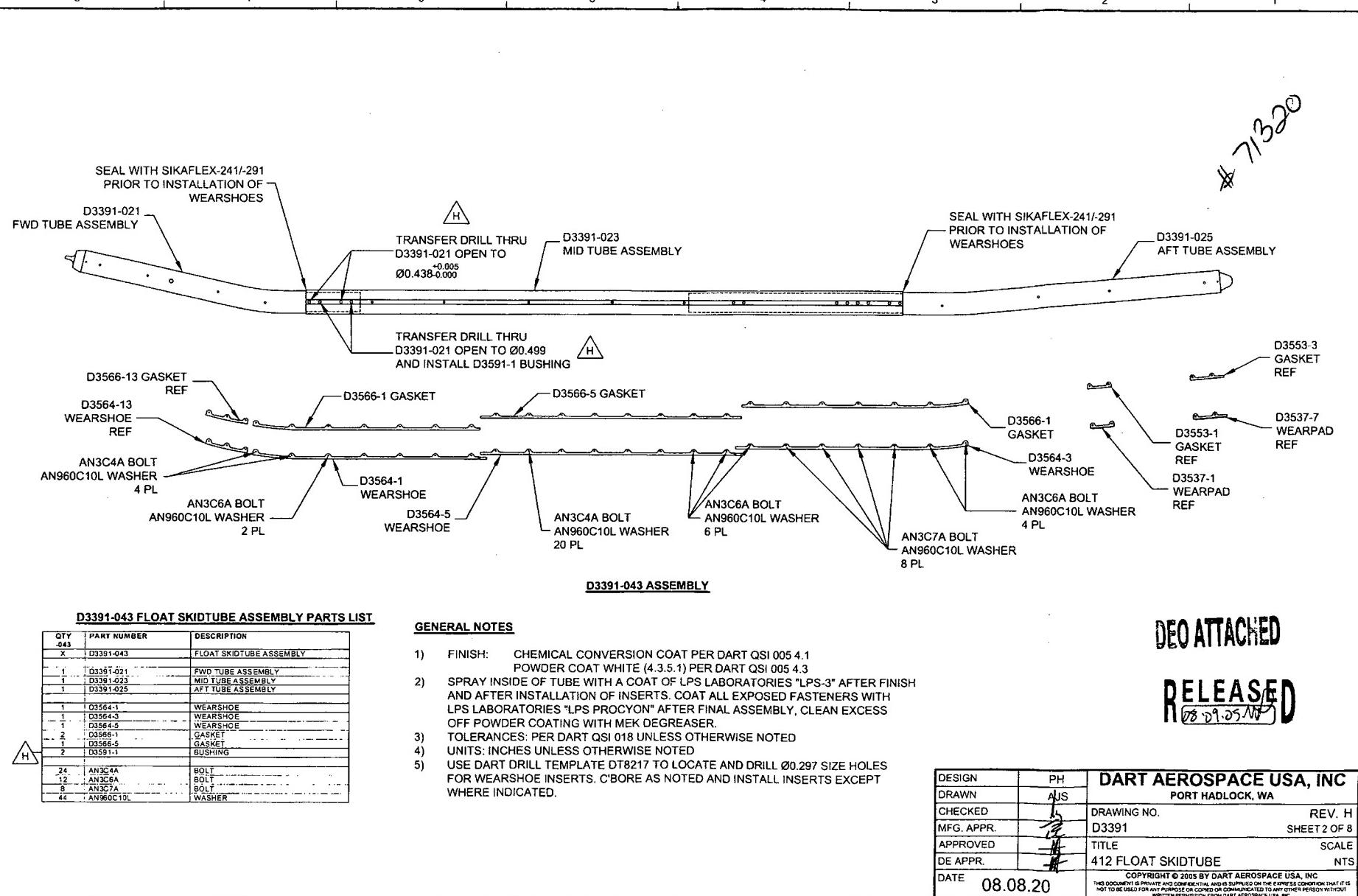
Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



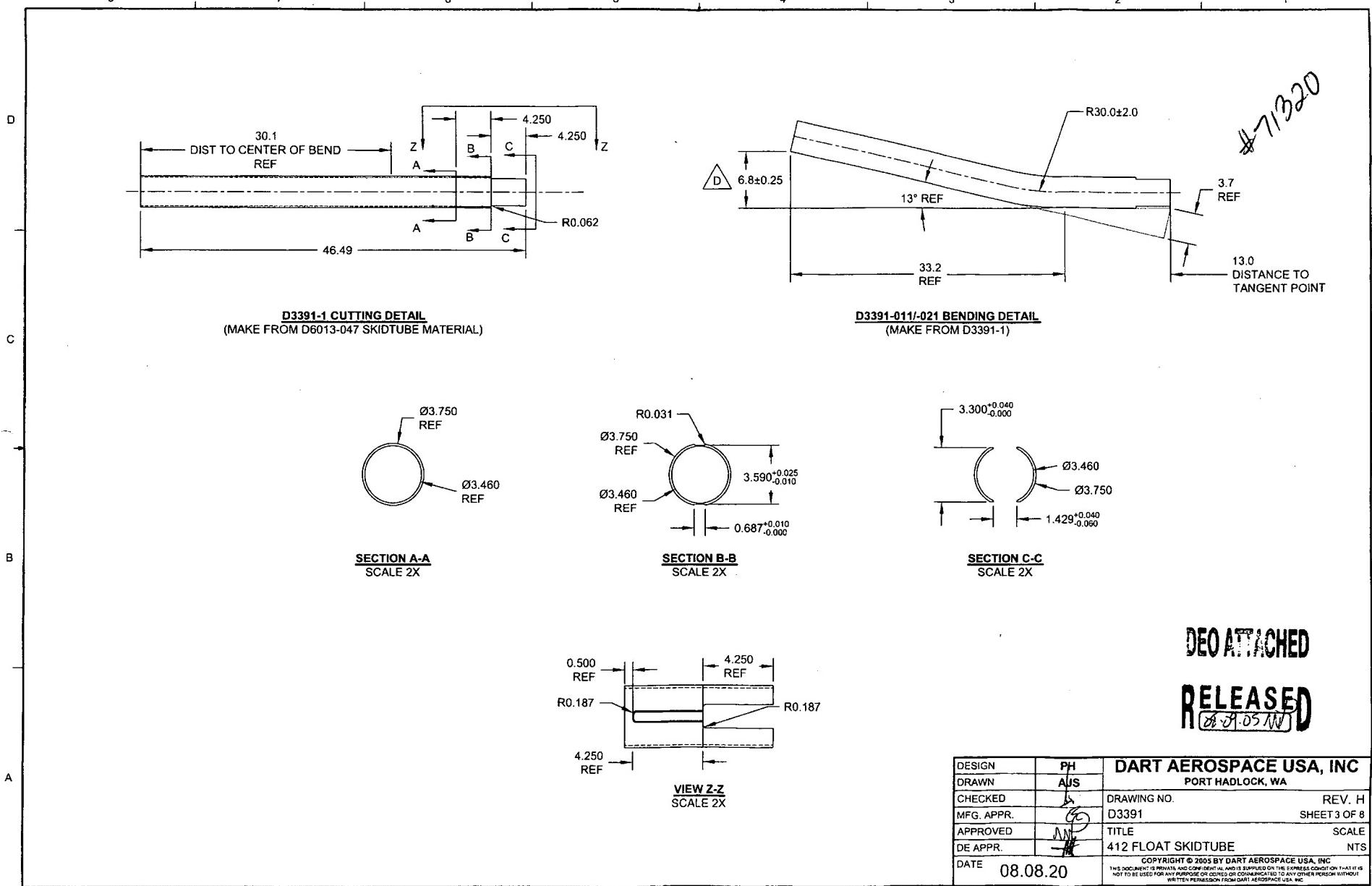
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1



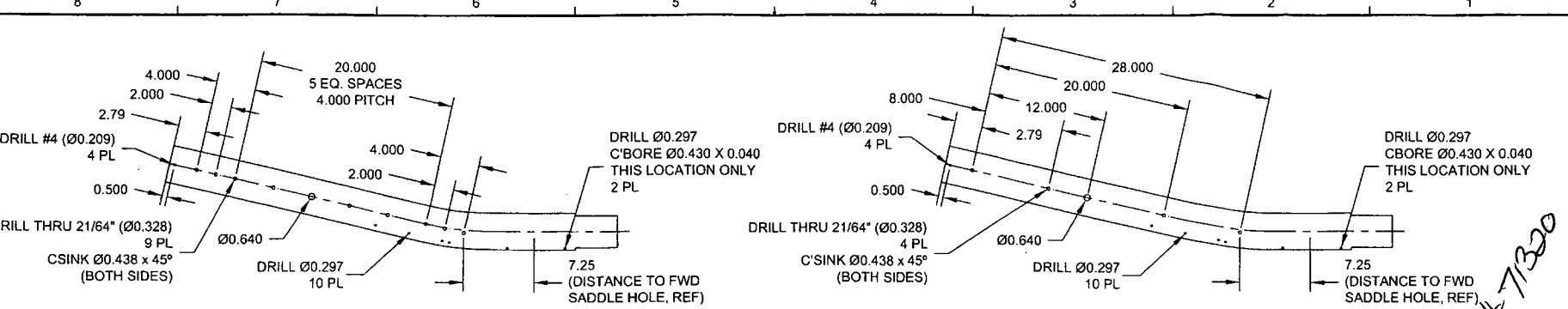
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

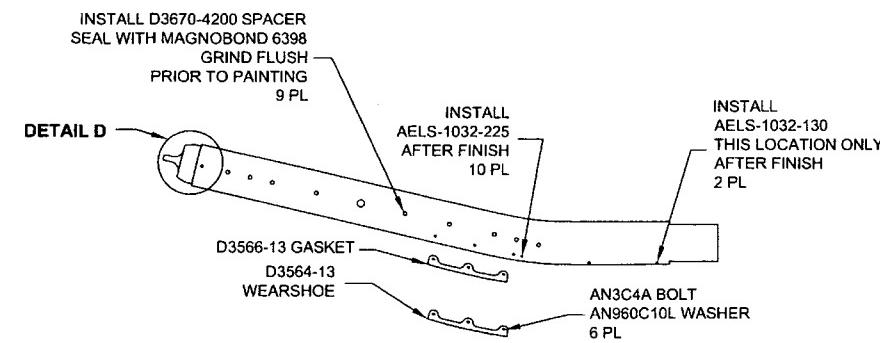
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 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

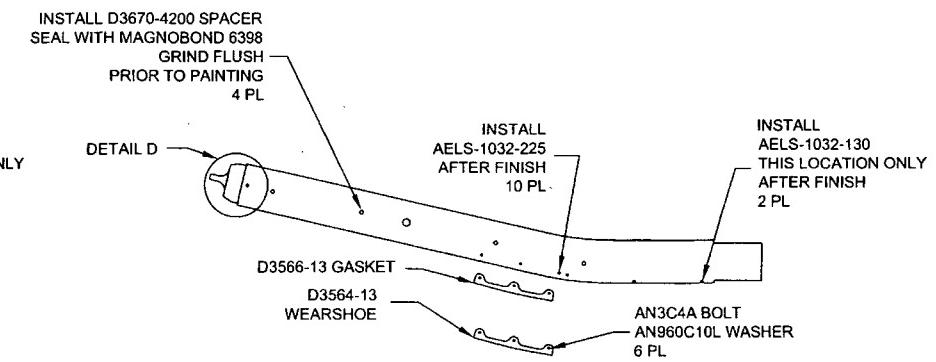
NOTE: Date & initial all entries



D3391-011 DRILLING DETAIL



D3391-011 ASSEMBLY DETAIL



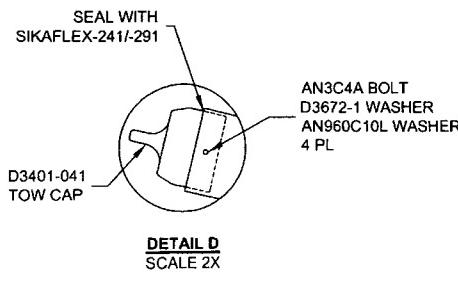
D3391-021 ASSEMBLY DETAIL

DET ATTACHED

RELEASED
08-09-05 M

D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X	X	D3391-011	FWD TUBE ASSEMBLY
		D3391-021	FWD TUBE ASSEMBLY
1	1	D6013-047	FWD TUBE
1	1	D3401-041	TOW CAP
1	1	D3564-13	WEARSHOE
1	1	D3566-13	GASKET
9	4	D3670-4200	SPACER
4	4	D3672-1	WASHER
10	10	AN3C4A	BOLT
10	10	AN960C10L	WASHER
2	2	AELS-1032-130	INSERT
10	10	AELS-1032-225	INSERT



DETAIL D
SCALE 2X

DESIGN	PH	DART AEROSPACE USA, INC
DRAWN	AJS	PORT HADLOCK, WA
CHECKED	<i>[initials]</i>	DRAWING NO.
MFG. APPR.	<i>[initials]</i>	REV. H
APPROVED	<i>[initials]</i>	D3391
DE APPR.	<i>[initials]</i>	SHEET 4 OF 8
DATE	08.08.20	TITLE
		412 FLOAT SKIDTUBE
NTS		

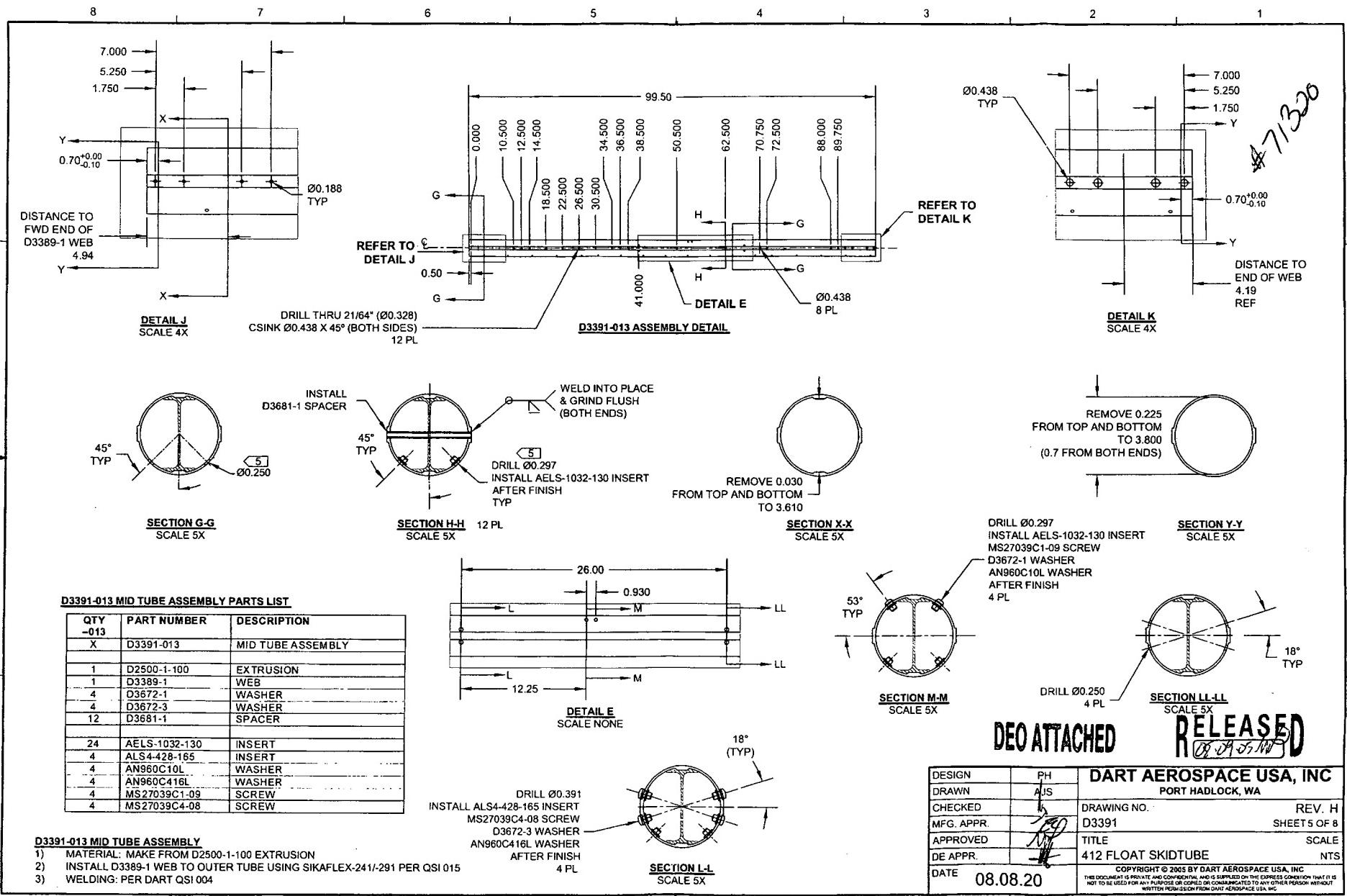
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

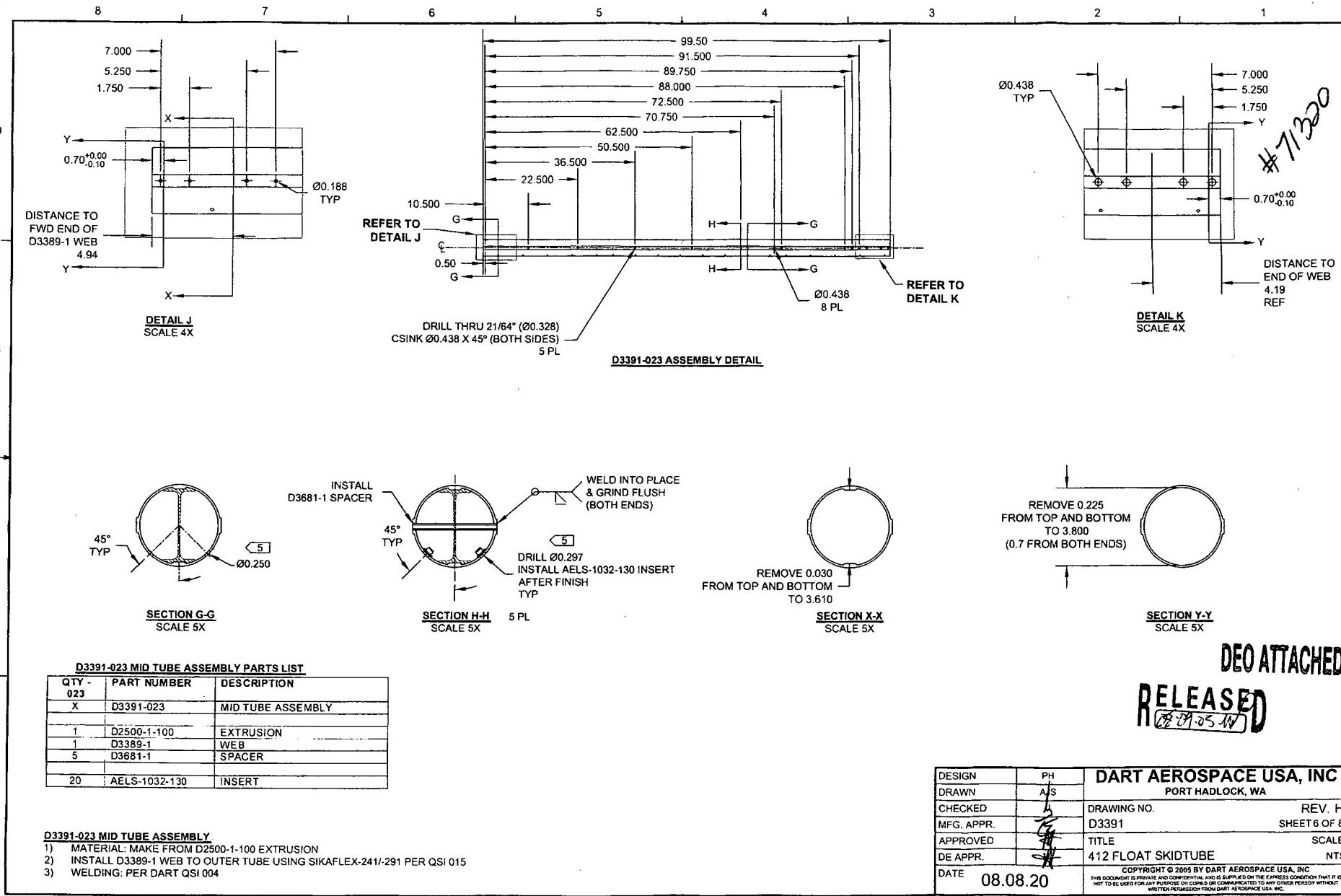


W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

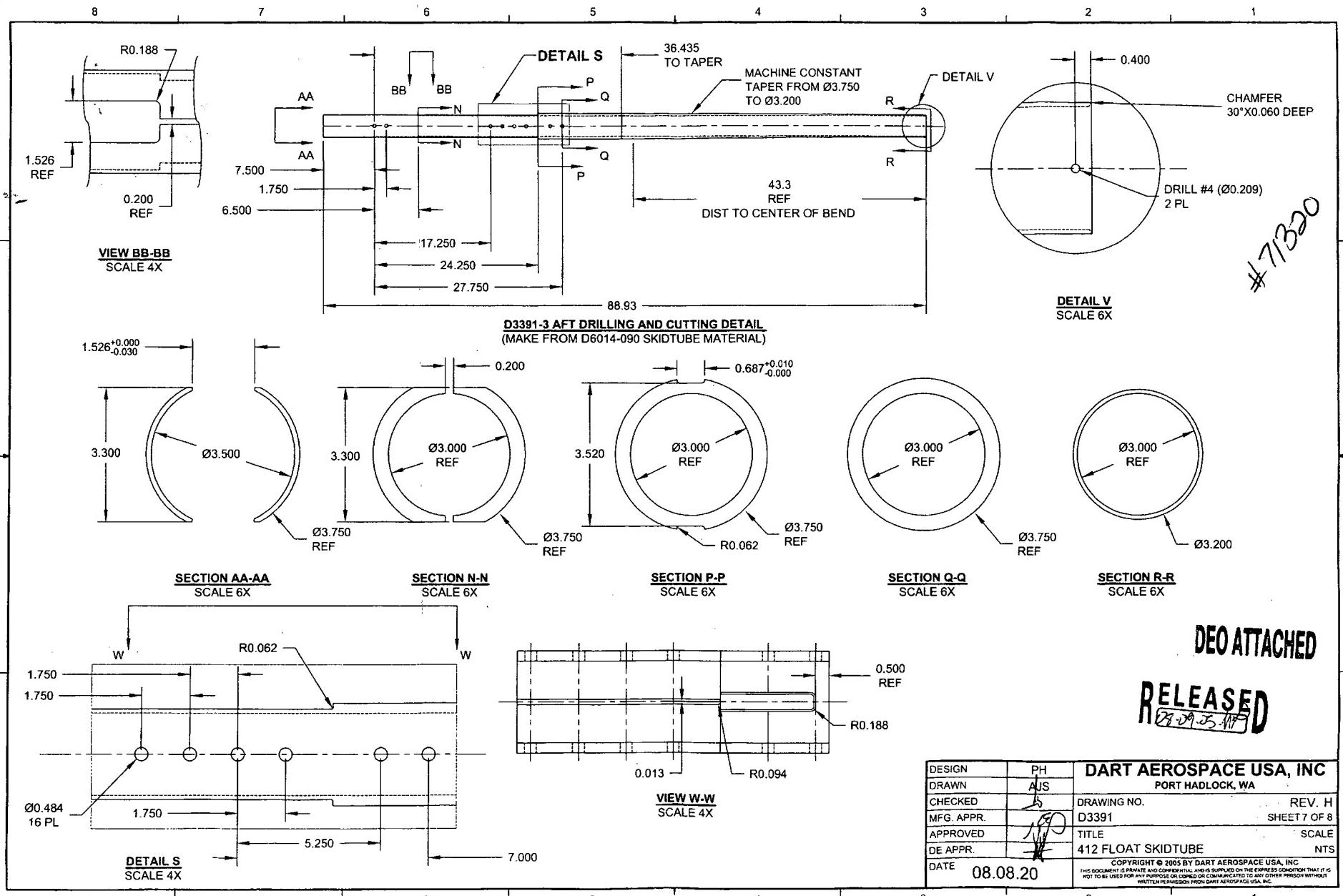


W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

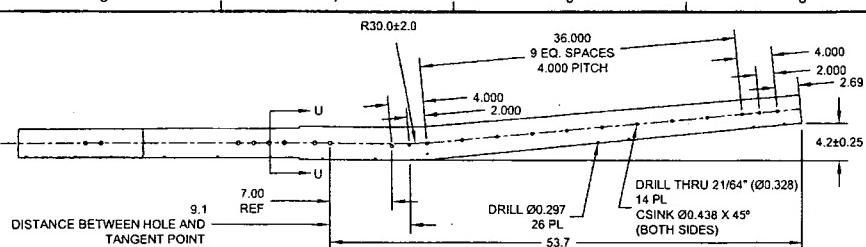


W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

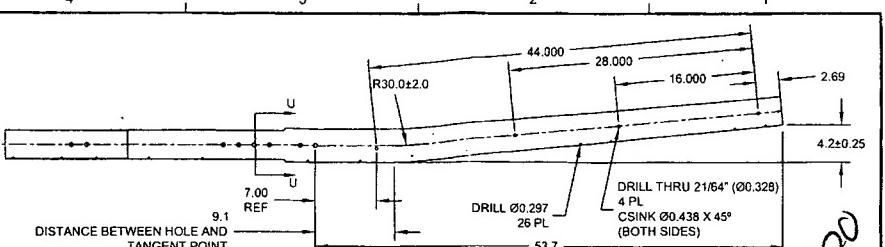
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 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

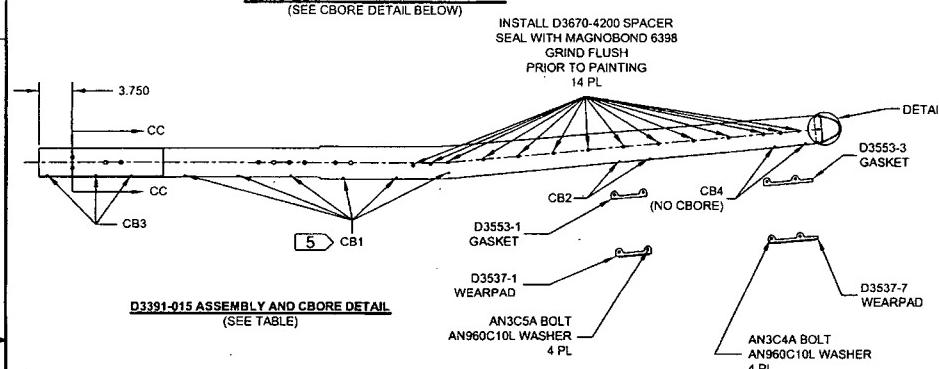
NOTE: Date & initial all entries



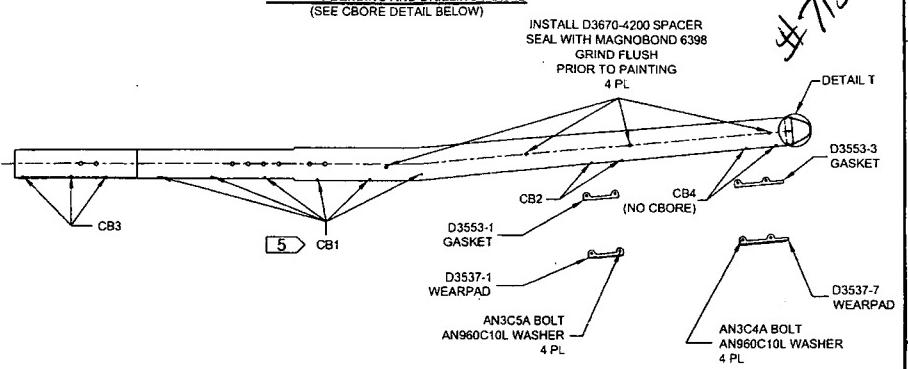
D3391-015 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)



D3391-025 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)

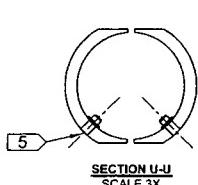


D3391-015 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)

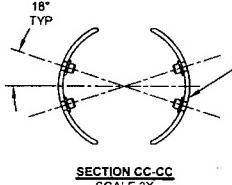


D3391-025 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)

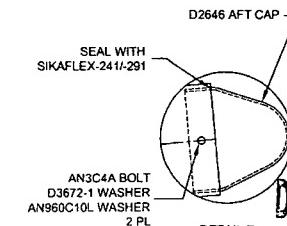
QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X	D3391-015	AFT TUBE ASSEMBLY	
X	D3391-025	AFT TUBE ASSEMBLY	
1	1	D6014-090	AFT TUBE
1	1	D2646	AFT CAP
1	1	D3537-1	WEARPAD
1	1	D3537-7	WEARPAD
1	1	D3553-1	GASKET
1	1	D3553-3	GASKET
14	4	D3670-4200	SPACER
2	2	D3672-1	WASHER
14	14	AELS-1032-130	INSERT
12	12	AELS-1032-225	INSERT
4	4	ALS4-428-165	INSERT
6	6	AN3C4A	BOLT
4	4	AN3C5A	BOLT
10	10	AN960C10L	WASHER



SECTION U-U
SCALE 3X



SECTION CC-CC
SCALE 3X



DETAIL T
SCALE 4X

DEO ATTACHED

RELEASED
08-09-05-10

CBORE HOLES MARKED CB1-CB4 AS FOLLOWS AND
INSTALL AELS-1032-XXX AFTER FINISH AS NOTED

HOLES MARKED	QTY D3391-015	QTY D3391-025	CBORE	P/N
CB1	12	12	Ø0.430 X 0.170	AELS-1032-225
CB2	4	4	Ø0.430 X 0.170	AELS-1032-130
CB3	6	6	Ø0.430 X 0.040	AELS-1032-130
CB4	4	4	NONE	AELS-1032-130

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 8 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
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8 7 6 5 4 3 2 1

A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DRAWING NO. D3391	TITLE 412 FLOAT SKIDTUBE	REV. H	DART AEROSPACE USA, INC ENGINEERING ORDER	D.E.O. NO. D3391-H-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>CD</i>	CHECKED <i>h</i>	MFG. APPR. <i>AA</i>	APPROVED <i>MP</i>	DE APPR. <i>h</i>		
DATE 09.09.23	DATE 09.09.24	DATE 09/09/25	DATE 09/09/30	DATE 09/09/30	DATE 09/09/30	

PURPOSE:

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF D3391-041/043 SKIDTUBES.

CHANGE:

AMEND NOTE 2 OF D3391-041/043 SKIDTUBE ASSEMBLIES (ZN A6-1, A6-2) AS FOLLOWS:

- 2) ~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH
AND AFTER INSTALLATION OF INSERTS.~~ COAT ALL EXPOSED FASTENERS WITH
LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS
OFF POWDER COATING WITH MEK DEGREASER.

RELEASED

2010-02-02

MP X71320

W/O:

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng./ Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries